

REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application. Claims 1, 4-18, 20-27, 29-42, 44-45, and 48-52 are pending, of which claims 1, 12-13, 16, 24, 26, 37, 42, and 44 have been 5 amended. The claim amendments are supported at least at page 13, lines 14-24; at page 14, lines 15-19; and in Figs. 4-6.

Applicant's amendments and remarks after Final are appropriate under 37 C.F.R. §1.116 because they address the Office's remarks in the Final Action, and thus could not have been presented earlier. In addition, the 10 amendments and remarks should be entered to place the case in better form for appeal.

35 U.S.C. §102 Claim Rejections

Claims 1-18, 20-42, 44-45, and 48-52 are rejected under 35 U.S.C. 15 §102(e) as being anticipated by U.S. Patent Publication No. 2002/0126171 to Subirada et al. (hereinafter, "Subirada") (*Office Action* p.2). Applicant notes that Subirada and the subject application are commonly assigned to the Hewlett-Packard Company. Applicant respectfully traverses the rejection.

20 Claim 1 recites a printing device, comprising:

a pen configured to transfer an imaging medium onto a print media to form printed diagnostic images that each include at least a first print swath image and a second print swath image;

25 a sensor configured to scan along a horizontal axis of the print media to detect pen swath optical densities from non-printed space of the print media and the printed diagnostic images, the pen swath optical density of a printed diagnostic image being detected from the at least first print swath image, the second print swath image, and the non-printed space of the imaging medium proximate the at least first print swath image and the second print swath image;

an application component configured to determine an error compensation factor from the pen swath optical densities of the printed diagnostic images; and

5 a print media line-feed advance configured to be offset corresponding to the error compensation factor.

Claim 1 recites "a sensor configured to scan along a horizontal axis of the print media to detect pen swath optical densities from non-printed space of 10 the print media and the printed diagnostic images, the pen swath optical density of a printed diagnostic image being detected from the at least first print swath image, the second print swath image, and the non-printed space of the imaging medium proximate the at least first print swath image and the second print swath image".

15 Subirada describes that a measurement or test pattern is scanned along paths 19-1 and 19-2, and that the measurements produce for each pen, signal-level data "that are objective representations of reflectivity in the printed patterns as a function of distance along the printing-medium advance axis y" (*Subirada* ¶[0181]). Subirada Figs. 1, 4, and 4A illustrate that the scan paths 20 19-1 and 19-2 scan along the vertical y-axis of the printing-medium. Contrary to Subirada, claim 1 recites that a sensor scans along a horizontal axis of the print media to detect pen swath optical densities.

Accordingly, claim 1 along with dependent claims 4-15 are allowable over Subirada which does not anticipate each and every element recited in 25 claim 1 as would be required to substantiate the §102 rejection. Applicant respectfully requests that the §102 rejection be withdrawn.

5 Claim 16 recites a printing device comprising “a sensor configured to scan along a horizontal axis of the print media to detect pen swath optical densities from non-printed space of the print media and the printed diagnostic image, the pen swath optical densities of the printed diagnostic image being detected from the first swath images, the second swath images, and the non-printed space of the print media proximate the first swath images and the second swath images;”.

10 As described above in response to the rejection of claim 1, Subirada describes scanning along a vertical y-axis of the printing-medium which is contrary to a “scan along a horizontal axis of the print media to detect pen swath optical densities”, as recited in claim 16.

Accordingly, claim 16 along with dependent claims 17-18 and 20-25 are allowable over Subirada and Applicant respectfully requests that the §102 rejection be withdrawn.

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20 Claim 26 recites a method to correct printing mechanism swath height and line-feed advance errors comprising “detecting pen swath optical densities from non-printed space of the print media and the diagnostic image by scanning along a horizontal axis of the print media, the pen swath optical densities being detected from the first swath images, the second swath images, and the non-printed space of the print media proximate the first swath images and the second swath images;”.

25 As described above in response to the rejection of claim 1, Subirada describes scanning along a vertical y-axis of the printing-medium which is contrary to a “scanning along a horizontal axis of the print media”, as recited in claim 26.

Accordingly, claim 26 along with dependent claims 27 and 29-36 are allowable over Subirada and Applicant respectfully requests that the §102 rejection be withdrawn.

5 Claim 37 recites a method to determine a printing device media line-feed advance offset, comprising “detecting a first optical density correlating to a first offset between the first swath images and corresponding second swath images by scanning along a horizontal axis relative to the swath images, the first optical density being detected from the first swath images, the second 10 swath images, and non-printed space proximate the first swath images and the second swath images;”.

As described above in response to the rejection of claim 1, Subirada describes scanning along a vertical y-axis of the printing-medium which is contrary to “scanning along a horizontal axis relative to the swath images”, as 15 recited in claim 37.

Accordingly, claim 37 along with dependent claims 38-41 are allowable over Subirada and Applicant respectfully requests that the §102 rejection be withdrawn.

20 Claim 42 recites “detecting pen swath optical densities from a printed diagnostic image formed with first swath images and second swath images by scanning along a horizontal axis relative to the swath images, the pen swath optical densities being detected from the first swath images, the second swath images, and non-printed space proximate the first swath images and the second 25 swath images;”.

As described above in response to the rejection of claim 1, Subirada describes scanning along a vertical y-axis of the printing-medium which is

contrary to "scanning along a horizontal axis relative to the swath images", as recited in claim 42.

Accordingly, claim 42 is allowable over Subirada and Applicant respectfully requests that the §102 rejection be withdrawn.

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10 Claim 44 recites "detecting pen swath optical densities from the diagnostic image by scanning along a horizontal axis of the print media, the pen swath optical densities being detected from the first swath images, the second swath images, and non-printed space of the print media proximate the first swath images and the second swath images;".

As described above in response to the rejection of claim 1, Subirada describes scanning along a vertical y-axis of the printing-medium which is contrary to "scanning along a horizontal axis of the print media", as recited in claim 44.

15 Accordingly, claim 44 along with dependent claims 45 and 48-52 are allowable over Subirada and Applicant respectfully requests that the §102 rejection be withdrawn.

Conclusion

Pending claims 1, 4-18, 20-27, 29-42, 44-45, and 48-52 are in condition for allowance. Applicant respectfully requests reconsideration and issuance of the subject application. If any issues remain that preclude issuance of this 5 application, the Examiner is urged to contact the undersigned attorney before issuing a subsequent Action.

Respectfully Submitted,

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